

CLAIMS

1. A method of communication between first and second information devices, comprising the steps of:
 - 5 initiating communication between the devices by alerting one of the devices to the presence of another;
 - passing at least one message between the devices to provide to the first device the address within an information technology network of a second proxy entity for the second device;
 - 10 connecting the first device to a first proxy entity for the first device, and passing to the first proxy the address within the network of the second proxy;
 - passing messages between the first and second proxies to establish at least one parameter governing data exchange between the first and second devices; and
 - conducting communication between the first and second devices in accordance
- 15 with the at least one parameter by passing messages at least directly between the devices.
2. A method according to claim 1 wherein messages passing between the first and second devices pass via a first communication link having a first speed of data transmission, and messages passing between the first and second proxies pass via a second communication link having a second speed of data transmission, the second speed being faster than the first speed.
- 25 3. A method according to claim 2 wherein the first communication link has first frequency bandwidth, second communication link has a second frequency bandwidth which is wider than the first frequency bandwidth.
4. A method according to claim 1 wherein the at least one parameter is in a category of parameter selected from the group consisting of: parameters related to
- 30 device computing capability; parameters relating to device owner/user information; parameters related to encryption of data, and parameters related to policy data.

5. A method according to claim 3 further comprising the step of passing from at least one of the devices to its proxy a data level rating, indicating the types of data it is permissible to consider in determining the at least one parameter.
- 5 6. A method according to claim 5 wherein parameters governing data exchange between the devices are established in relation to each type of data specified in the data level rating.
7. A method according to claim 4 wherein the step of passing messages between 10 the first and second proxies includes the step of sending from one proxy to another data relating at least to one of the device's intrinsic capability to process and store data, and wherein at least one parameter determined on the basis of the device's intrinsic processing and storage capability is established.
- 15 8. A method according to claim 1 wherein the first and second proxies are each connected to the internet, and messages are passed between the first and second proxies in the form of XML documents.
9. A method according to claim 8 wherein the step of passing messages between 20 the first and second proxies includes the step of sending from the first proxy to the second proxy the URL of the first proxy.
10. A method according to claim 1 wherein at least one of the devices is portable and has a battery.
- 25 11. A method according to claim 10 wherein one of the devices is a device having a fixed location.
12. A method according to claim 1 wherein both devices are portable and have a 30 battery.
13. A method according to claim 1 wherein communication between the first and second devices is wireless communication.

- 14 A method according to claim 13 wherein communication between the first and second devices is via a bluetooth communications port.
15. A method according to claim 13 wherein communication between the first and 5 second devices is via an infra red communications port.
16. A method according to claim 1 wherein connection of at least one of the devices to its proxy is via a wireless communication link.
- 10 17. A method according to claim 16 wherein the wireless communication link is provided by a GSM card connected to one of the devices.
- 15 18. A method according to claim 1 wherein at least the first device is portable, and the first proxy is connected to the first device via a hardwired communications connection.
19. A method according to claim 18 wherein the first proxy is portable.
- 20 20. A method according to claim 19 wherein at least the first proxy is provided by a laptop computer.
- 25 21. A method according to claim 19 wherein the connection between the first proxy and the second proxy is made via a communications connection which includes a mobile telephone connection.
22. A method according to claim 1 wherein the step of conducting communication between the first and second users in accordance with the at least one parameter using at least the first and second devices includes the step of relaying communications received by at least one of the devices to its proxy.
- 30 23. A method according to claim 22 further comprising the step of processing, using the proxy, communications received by the at least one device, and sending a message back to the at least one device.

24. A method of wireless communication between first and second information devices comprising the steps of:

passing at least a message between the devices via a wireless communication link, the message indicating an address within a network of a first proxy entity for the
5 first device;

exchanging messages between the first proxy and a second proxy entity for the second device to determine at least one parameter governing communication between the devices using the wireless link; and

conducting communication between the devices via the wireless link in
10 accordance with the at least one parameter.

25. A method according to claim 24, further comprising the step of relaying a message received via the wireless link by one of the devices to its respective proxy.

15 26. A method according to claim 24 wherein at least the first device is portable, and has a battery.

27. A method according to claim 26 wherein the second device is a beacon.

20 28. A method according to claim 27 wherein a plurality of beacons are provided having different physical locations, and messages are exchanged between the first device and at least one of the beacons.

25 29. A method according to claim 28 wherein the at least one parameter includes at least one parameter determining policy for content appropriate for the first device.

30. A method according to claim 29 further comprising the steps of:

moving the first device through the plurality of beacons;

determining on the basis of which beacon is in communication with the first
30 device, a location of the first device; and

transmitting content to the first device in accordance with the policy and the location of the first device.

31. A method according to claim 29 further comprising the step of:

transmitting between the first device and a beacon, a signal providing an indication of physical proximity to the beacon;
determining the aforesaid physical proximity; and
transmitting content to the first device in accordance with the policy and the
5 physical proximity.

32. A method according to claim 30 further comprising the steps of:
transmitting between the first device and a beacon, a signal providing an indication of physical proximity to the beacon;
10 determining the aforesaid physical proximity; wherein
the content transmitted to the first device is additionally in accordance with the aforesaid physical proximity.

33. A method of providing a proxy service to an information device in an
15 information technology network comprising the steps of:
registering with a first proxy at least a first information device, including storing
at least one parameter related to operative capability of the first information device;
negotiating with a second proxy acting on behalf of a second information device
to establish at least one parameter governing interaction between the first and second
20 information devices; and
sending to the first information device from the first proxy the at least one
parameter established during the negotiation.

34. A method according to claim 33 wherein the negotiation takes place following
25 receipt of a message from the first information device containing an address within
the network of the second proxy.

35. A method according to claim 33 wherein the negotiation takes place following
receipt of a message from the second proxy containing the address within the network
30 of the second proxy.

36. A method according to claim 33 wherein the first information device
communicates with the first proxy via a communication link which is at least partly
wireless.

37. A method according to claim 33 wherein negotiation between the first and second proxies includes the step of sending from one proxy to another data relating at least to one of the information device's intrinsic capability to process and store data, and wherein the at least one parameter is established on the basis of the device's 5 intrinsic processing and storage capability.